

Department of Energy

Ohio Field Office Fernald Environmental Management Project P. O. Box 538705 Cincinnati, Ohio 45253-8705 (513) 648-3155



DOE-0119-03

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DEC 0 4 2002

Mr. James A. Saric, Remedial Project Manager United States Environmental Protection Agency Region V-SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

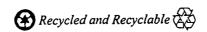
Mr. Tom Schneider, Project Manager Ohio Environmental Protection Agency 401 East 5th Street Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

DIRECT HAUL OF BULK WASTE MATERIALS TO THE WASTE PITS REMEDIAL ACTION PROJECT

References:

- Letter, J. Reising to J. Saric and T. Schneider, "Direct Haul of Bulk Waste Materials to the Waste Pits Remedial Action Project," dated November 2, 2001
- 2. Letter, T. Schneider to J. Reising, "Approval Direct Haul of Bulk Waste to WPRAP," dated November 15, 2001
- Letter, J. Reising to J. Saric and T. Schneider, "Direct Haul of Bulk Waste Materials to the Waste Pit Remedial Action Project," dated April 5, 2002
- 4. Letter, T. Schneider to J. Reising, "Approval of Direct Haul of Bulk Materials to WPRAP," dated May 7, 2002
- Letter, J. Reising to J. Saric and T. Schneider, "Direct Haul of Bulk Waste Materials to the Waste Pits Remedial Action Project," dated August 13, 2002
- 6. Letter, T. Schneider to J. Reising, "Approval Direct Haul of Additional Bulk Wastes to WPRAP," dated August 21, 2002



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Mr. James A. Saric Mr. Tom Schneider

This letter provides written notification of approximately 5,000 additional containers that the Fernald Environmental Management Project (FEMP) plans to transfer to the Waste Pits Remedial Action Project (WPRAP) for bulk disposition to Envirocare of Utah via unit train. All 5,000 waste containers have completed characterizations that indicate they are Non-Resource Conservation and Recovery Act (RCRA), Non-Toxic Substance Control Act (TSCA), Low Level Radiological Waste. In general, they are the same type of material as those the FEMP has processed over the past year. Methods used to manage the material will conform to the conditions outlined in the correspondence referenced above, between the United States Department of Energy, United States Environmental Protection Agency, and Ohio Environmental Protection Agency. However, in the next evolution of this process, the FEMP plans to streamline waste bulking activities by eliminating the step of dumping wastes from containers to roll-off boxes prior to transfer to the WPRAP. Instead, the waste containers will be transferred to the WPRAP where they will be staged, processed, and loaded out in conjunction with waste pit contents.

Containers will be transferred weekly from the Plant 1 Pad to the WPRAP staging area, sufficient to support the anticipated processing rate. The target throughput for processing will be 500 containers per week. An inventory will be maintained to support this rate, not to exceed 500 containers at the staging area at any time. As operations proceed, the number of staged containers will be adjusted to match the processing rate. All Legacy containers will be processed out by May 29, 2003.

Attachment A provides information regarding the 5,000 waste containers. Attachment B provides a sketch of the area where waste containers will be staged for processing by the WPRAP. Attachment C provides a description of activities that will be conducted by the WPRAP to receive and process the containers.

If you have any questions or comments, please contact John Sattler at (513) 648-3145.

Sincerely

FEMP: Taylor

Johnny W. Reising

Fernald Remedial Action

Project Manager

Enclosures: As Stated

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Mr. James A. Saric Mr. Tom Schneider

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cc w/enclosures:

- N. Hallein, EM-31/CLOV
- J. Sattler, OH/FEMP
- E. Skintik, OH/FEMP
- V. Taylor, OH/FEMP
- T. Schneider, OEPA-Dayton (three copies total of enclosure)
- G. Jablonowski, USEPA-V, SRF-5J
- F. Bell, ATSDR
- M. Cullerton, Tetra-Tech
- M. Shupe, HSI GeoTrans
- R. Vandegrift, ODH
- AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

- R. Greenberg, EM-31/CLOV
- J. Kappa, OH/FEMP
- D. Lojek, OH/FEMP
- J. Buckley, Fluor Fernald, Inc./MS52-3
- D. Carr, Fluor Fernald, Inc./MS2
- M. Cherry, Fluor Fernald, Inc./MS52-2
- J. D. Chiou, Fluor Fernald, Inc./MS64
- T. Hagen, Fluor Fernald, Inc./MS9
- F. Johnston, Fluor Fernald, Inc./MS52-5
- S. Lorenz, Fluor Fernald, Inc./52-2
- T. Walsh, Fluor Fernald, Inc./MS52-3
- ECDC, Fluor Fernald, Inc./MS52-7

ATTACHMENT A ADDITIONAL WASTES FOR DIRECT HAUL

The containerized materials identified below are classified as Non-RCRA, Non-TSCA, Low Level Radiological Waste. The Uranium content of the wastes averages less than 0.5% Total Uranium. The Waste Acceptance Organization (WAO) has completed an initial review of these wastes that indicates they are appropriate for transfer to WPRAP for bulk disposition via rail to Envirocare in conjunction with Waste Pit contents. Prior to transfer of the containers to WPRAP, an evaluation of the wastes will be completed by WAO, Environmental Compliance (EC), and WPRAP Operations for waste acceptance, run-on/run-off and material processing. Their approvals will be documented on a site form called a Request for Disposal (RFD). Each of the RFD packages will include a data summary for chemical and radiological Constituents of Concern (COC) that supports the waste stream determinations. WAO will perform the following oversight activities in conjunction with field certification activities for excavated waste pit materials: verify that the correct containers are bulked; visually inspect the material for prohibited items and size requirements; and document compliance with WAC requirements using a Field Tracking Log (FTL).

Pilot Plant - 95 Containers

Bird Carcasses/Droppings; Alumina-Soda Lime; Filters; Merco-Dri; Hilco Cake; Soil/Rocks; Low grade process residues; Dust Collector Residues & Bags; MgF₂, Debris; Non-Uranium Scrap Metals; Scrap U₃O₈, Sludges (includes some w/oily sheen); Sump Cake; U Chloride, Fluoride, Sulfate or Nitrate Solution residuals

Plant 1 - 597 Containers

Chipped Floor Sealant; Cold Metal Oxides (Non Radium-Bearing); Filters; Soil/Rocks; Dust Collector Residues & Bags; Grit Blast Residue; MgF₂; Debris; Roasted Calcium-Precipitated Sump and Filter Cakes; Non-Uranium Scrap Metals; Scrap Salts (e.g., Floor Sweepings); Sludges (includes some w/oily sheen)

Plant 2/3 - 231 Containers

Bird Carcasses/Droppings; Alumina - Soda Lime; Filters; Graphite; Soil/Rocks; TBP and/or Kerosene Sludges; Low grade process residues; Dust Collector Residues & Bags; MgF₂; Debris; Non-Uranium Scrap Metals; Sludges (including some w/oily sheen); Sump Cake

Plant 4 - 29 Containers

Filters; Soil/Rocks; Dust Collector Residues & Bags; Debris; Off-Spec UF₄; Non-Uranium Scrap Metals; Scrap Salts (e.g., floor sweepings)

Plant 5 - 368 Containers

Filters; Graphite; Soil/Rocks; Dust Collector Residues & Bags; Grit Blast Residue; Cleaning Residues; MgF₂; Debris; Oily MgF₂; Non-Uranium Scrap Metals; Scrap Salts (e.g., Floor Sweepings); Scrap U₃O₈; Sludges (includes some w/ oily sheen); Sump Cake; Wet Crushed Slag From Furnace Pot Blowouts

Plant 6 - 654 Containers

Bird Carcasses/Droppings; Alumina - Soda Lime; CaF₂ - MgO; Soil/Rocks; Low grade process residues; Dust Collector Residues & Bags; MgF₂; Debris; Non-Uranium Scrap Metals; Scrap Salts (e.g., Floor Sweepings); Scrap U₃O₈; Sludges (including some w/oily sheen); Sump Cake

Plant 7 - 3 Containers

Debris

Plant 8 - 537 Containers

Bird Carcasses/Droppings; Filters; Soil/Rocks; Low grade process residues; Dust Collector Residues & Bags; Debris; Roasted Calcium-Precipitated Sump and Filter Cakes; Samples; Scrap U₃O₈; Sludges (including some w/ oily sheen); Sump Cake

Plant 9 - 273 Containers

Alumina - Soda Lime; Filters; Graphite; Soil/Rocks; Low grade process residues; Dust Collector Residues & Bags; Glass; Cleaning Residues; Debris; Scrap U₃O₈; Sludges (including some w/oily sheen)

Waste Pits - 121 Containers

Graphite; Soil/Rocks; Low grade process residues; Debris; Samples; Sludges (includes some w/oily sheen)

Silo 1, 2 & 3 - 59 Containers

Samples; Cold Metal Oxides - Non Radium-Bearing; Dust Collector Residues & Bags; Debris Soil/Rocks; Low grade process residues; Scrap Salts (e.g., Floor Sweepings) (all are non-11e2)

Site Laboratories & Sample Projects - 285 Containers

CaF₂ – MgO; Soil/Rocks; Dust Collector Residues & Bags; Debris; Samples; Sludges (includes some w/ oily sheen); Cold Metal Oxides (Non Radium-Bearing); MgF₂; Non-Uranium Scrap Metals; Scrap U₃O₈; Sump Cake; U Chloride, Fluoride, Sulfate or Nitrate Solution residuals

AWWT/Water Treatment/Sewage Treatment/General Sump - 78 Containers

Spent Activated Carbon; Debris; Sump Cake; Sludges (includes some w/oily sheen); Soil/Rock; Low Grade Process Residues; Filtered Sewage (non-infectious)

Boiler Plant/House - 102 Containers

Soil/Rocks; Debris; Sludges (includes some w/ oily sheen); U Chloride, Fluoride, Sulfate or Nitrate Solution residuals

<u>Garage/Maintenance/Electric Shop/Machine Shop/Infrastructure Construction – 212</u> Containers

Soil/Rocks; Debris; Floor Sweepings; Sludges (some w/oily sheen); Asphalt and Paving Materials; Alumina - Soda Lime; Non-Uranium Scrap Metals

Waste Management Projects/Facilities/Warehouses - 485 Containers

Graphite; Soil/Rocks; Debris; Low grade process residues; Scrap U₃O₈; Barium-Contaminated Materials; Chipped Floor Sealant; Dust Collector Residues & Bags; Cleaning Residues; Non-Uranium Scrap Metals; Sludges (including some w/oily sheen); glass

Waste Management D&D Facilities - 93 Containers

Filters; Soil/Rocks; Grit Blast Residue; Debris; Scrap Salts (e.g., Floor Sweepings); Sludges (includes some w/oily sheen)

Administration & Services Building - 27 Containers

Soil/Rocks; Debris

Laundry - 23 Containers

Filters; Soil/Rocks

Stores-Receiving - 39 Containers

Soil/Rocks; Dust Collector Residues & Bags; Grit Blast Residue; Debris

In Vivo Building - 3 Containers

Filters; Debris

Biodenitrification - 4 Containers

Soil/Rocks: Debris

Graphite Burner - 1 Container

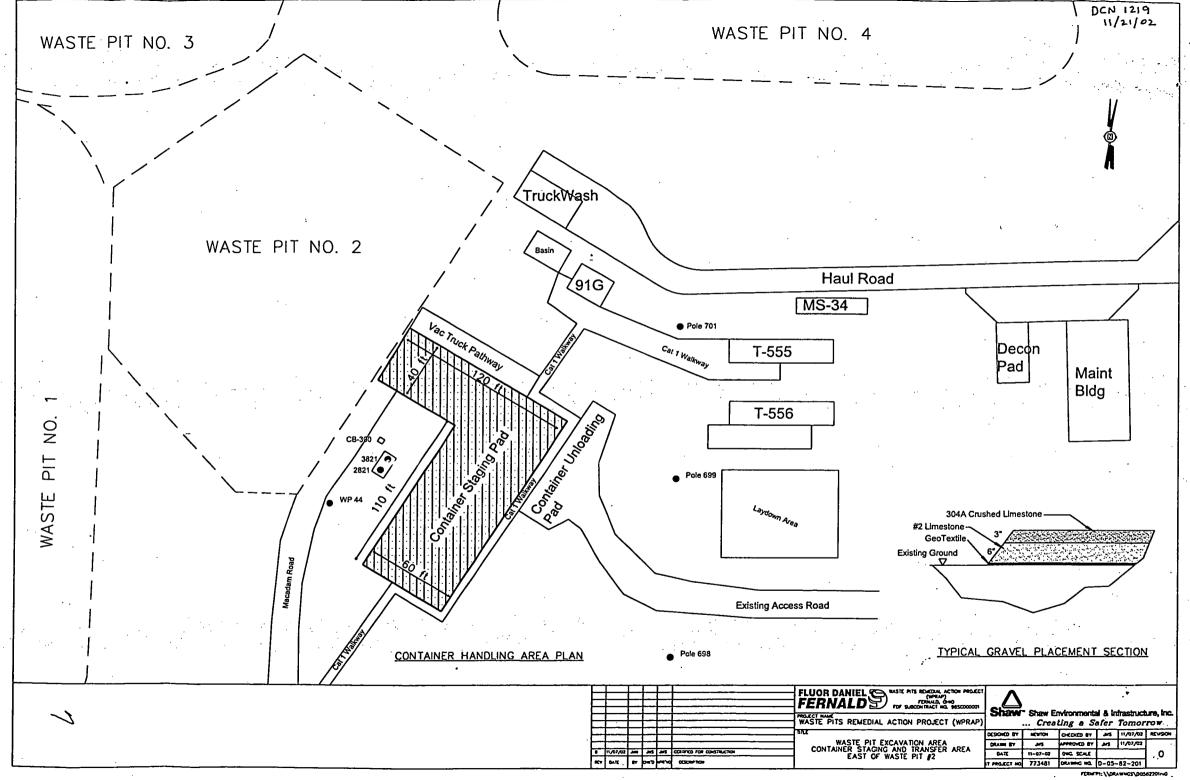
Non-Uranium Scrap Metals

Plibrico Incinerator - 10 Containers

Soil/Rocks

Off-Site Sources (e.g., historical materials for processing and returned samples) – 691
Containers (Advance Sciences, Advance Terra Testing, Alaron Corp., Battelle Memorial, Catholic University, Clemson Technical Center, Core Lab, Datachem Lab, Florida International Univ., IT Laboratory, Los Alamos Nat. Lab, Mallinckrodt Chemical Works, National Electric Coil, Nuclear Fuel Services, Quanterra Lab, Rapid Commercialization Project, Reactive Metals, Inc., Tri City Testing, University Of Cincinnati, Westinghouse Electric, Roy F. Weston Labs)

Soil/Rocks; Sludges (some w/ oily sheen); Sump Cake; Debris; Samples; Glass; Non-Uranium Scrap Metals; Low grade process residues; Filters; Scrap UO₂



ATTACHMENT C WASTE CONTAINER TRANSFER AND PROCESSING

Site Preparation

The area identified on Attachment B as the waste container staging area (WCSA) will be graded and covered with geo-textile and crushed stone such that precipitation flows towards the K-65 storm water basin. This area will serve as a drop-off point for containers as they are delivered by Waste Management, and will be utilized as a turn-around area for transport vehicles.

Schedule for Transferring and Processing Containers

Transfer of containers from the Plant 1 Pad to the WCSA at Waste Pit 2 is anticipated to commence in December 2002. Containers will be transferred weekly, sufficient to support the anticipated processing rate. The target throughput for processing will be 500 containers per week. An inventory will be maintained to support this rate, not to exceed 500 containers at the staging area at any time. As operations proceed, the number of staged containers will be adjusted to match the processing rate. All Legacy containers will be processed out by May 29, 2003. The containers will be tracked in the Site-Wide Waste Identification and Tracking System (SWIFTS) database as "Active" until processing is complete.

Transfer of Waste Containers to WCSA

Only Non-RCRA, Non-TSCA, Low Level Radiological Waste containers that are identified in Request For Disposal (RFD) packages issued by the Waste Acceptance Organization (WAO) will be transferred to the WCSA. The containers will be stacked no more than two high, and will be positioned such that access to other areas of the project is not restricted.

Processing of Waste Containers

Waste containers will be processed in Waste Pits 2 and 3. As the containers are taken from the WCSA to the waste pits, the container inventory numbers will be recorded on a log sheet. This information will be provided to Waste Management for updating the container status in the SWIFTS database.

Standard container handling methods including use of heavy equipment (e.g., shears) will be used to breach the containers and to empty the waste material. The containers will be crushed and otherwise size reduced to Envirocare debris size requirements (less than 8 feet in any dimension and less than ten inches in at least one dimension). The waste material, including the size-reduced containers, will then be taken to the Material Handling Building for load-out in conjunction with other Waste Pit materials.